

FIG. 1

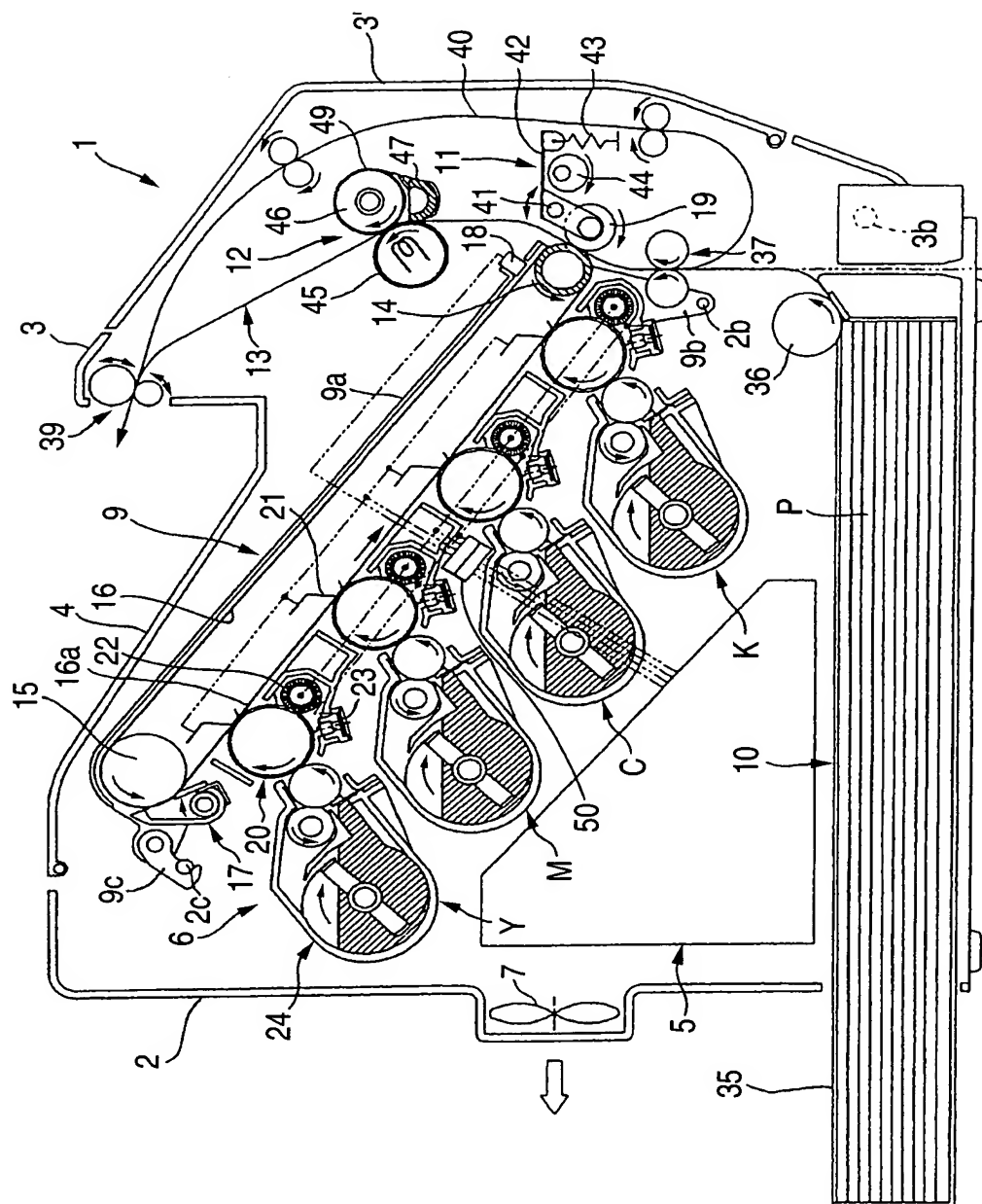


FIG. 2

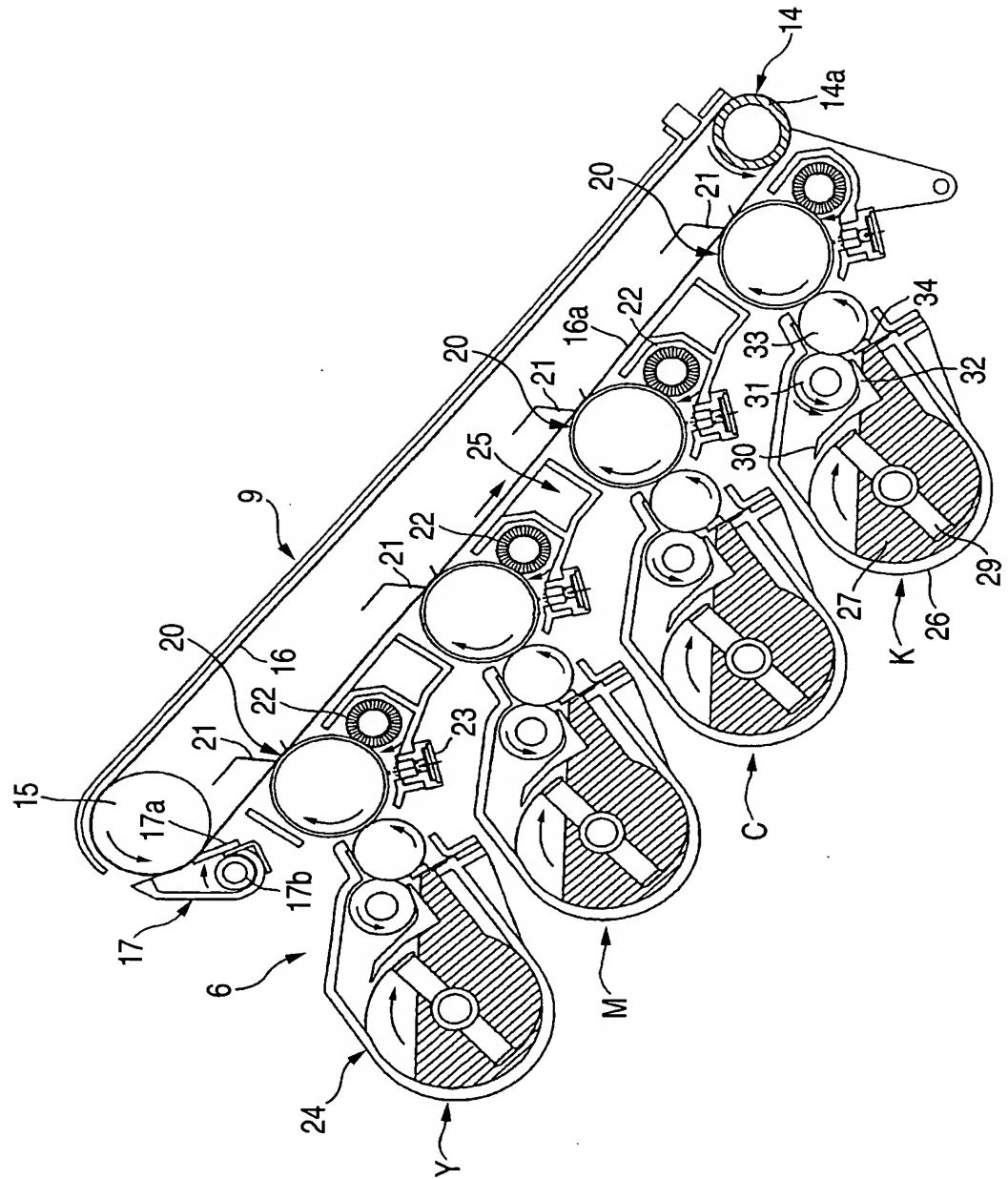


FIG. 3

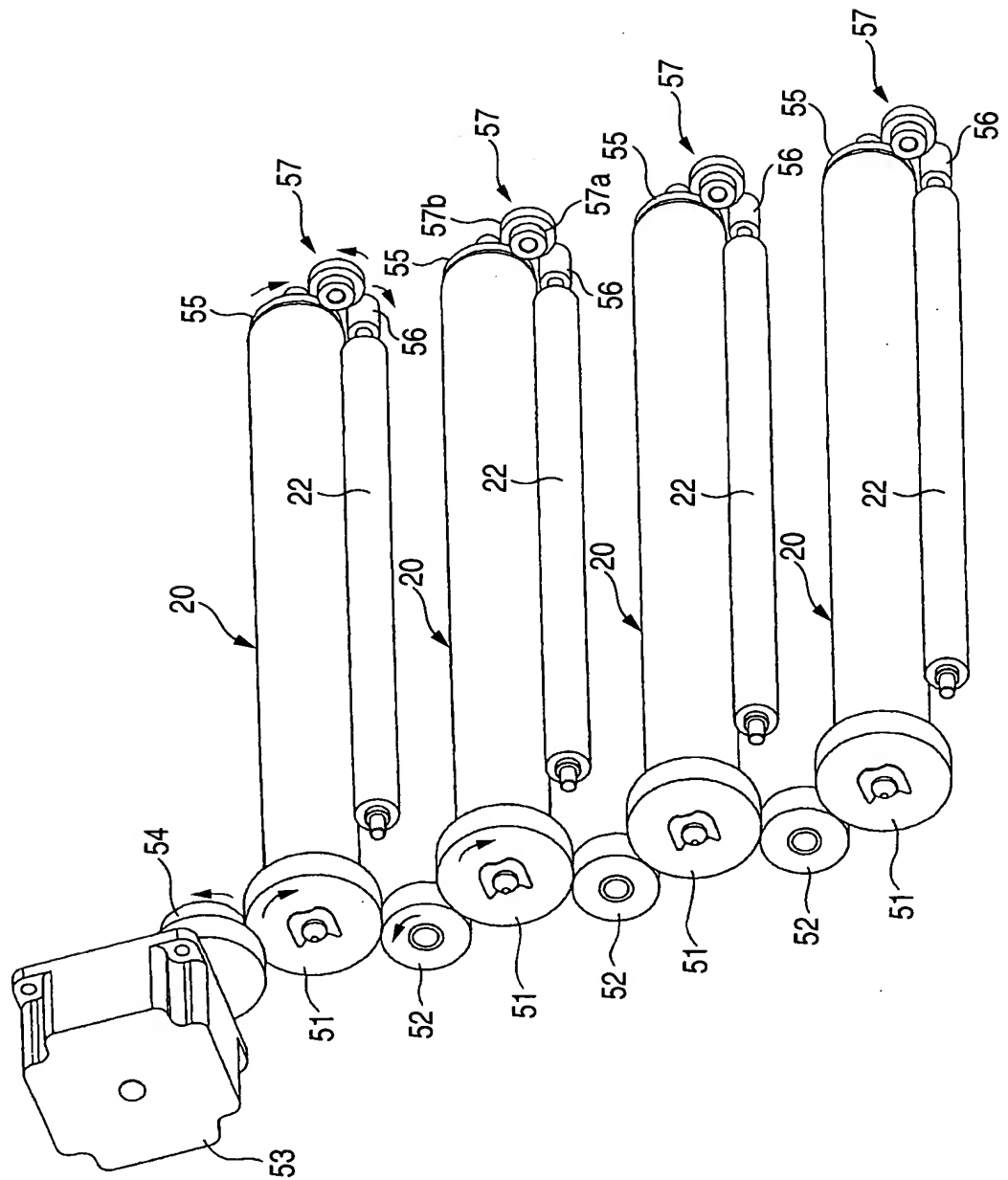


FIG. 4

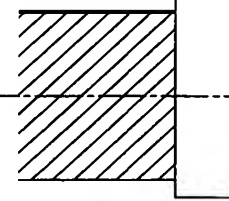
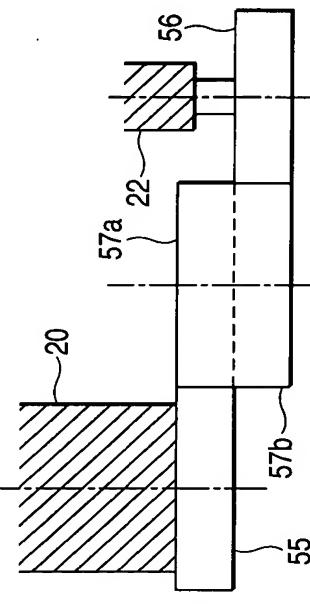
	COMPARATIVE EXAMPLE 1	EMBODIMENT 1		
	PHOTOSENSITIVE MEMBER	PHOTOSENSITIVE MEMBER	STEP-UP GEAR	BRUSH ROLLER
OUTER DIAMETER (mm)	30	30	-	14
TEETH NUMBER				
MODULE: 0.5 TRANSFER EFFICIENCY: 0.95				
NUMBER OF REVOLUTIONS (rpm)	99.10	99.10	239.49	419.11
PERIPHERAL VELOCITY (mm/SEC)	155.67	155.67	-	307.22
DRIVING TORQUE (N·m)				
PHOTOSENSITIVE MEMBER	0.0245	0.0245		
BRUSH ROLLER	0	0.0230	0.0090	0.0049
<TOTAL>	<u>0.0245</u>	<u>0.0475</u>		

FIG. 5

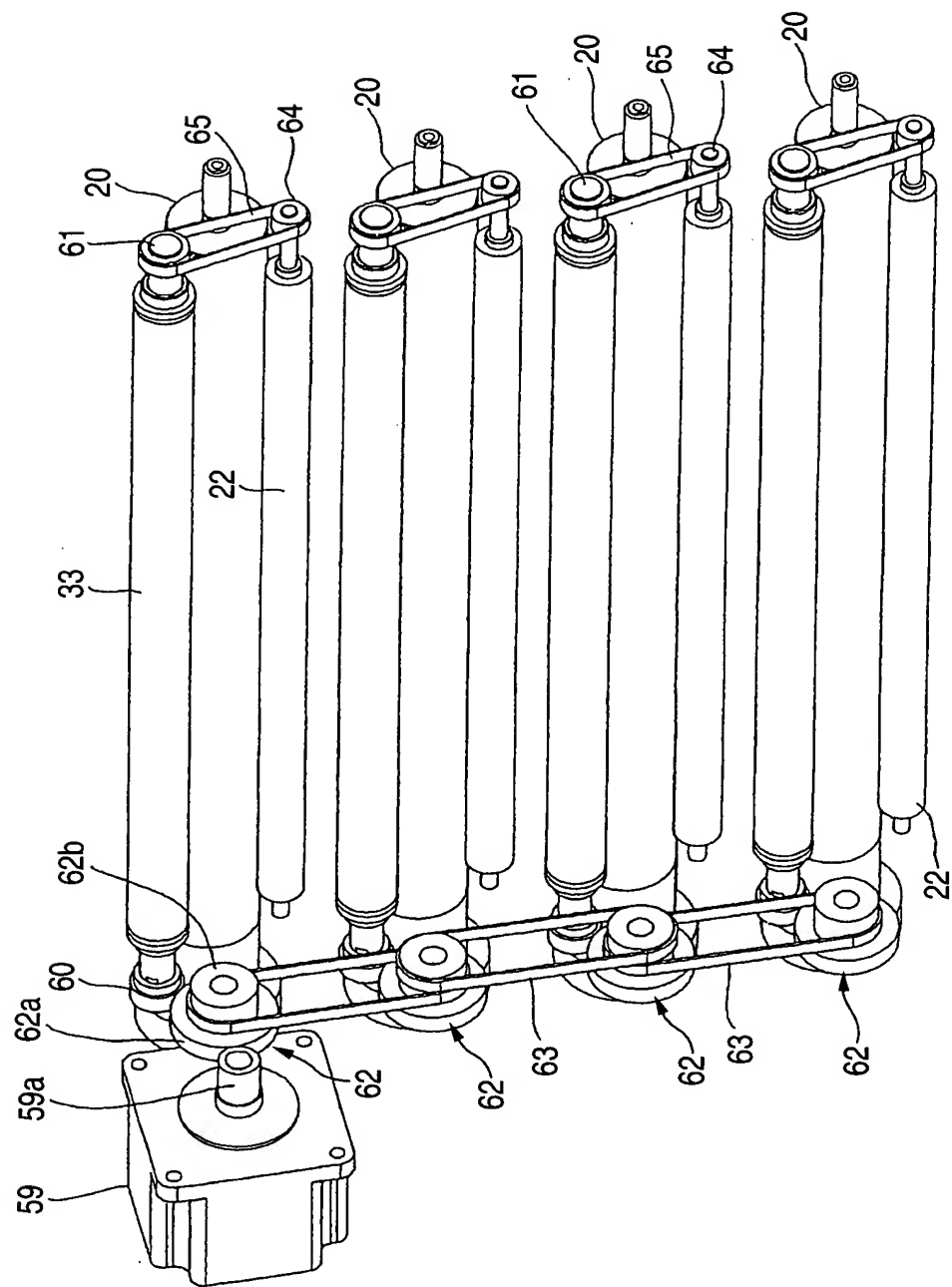


FIG. 6

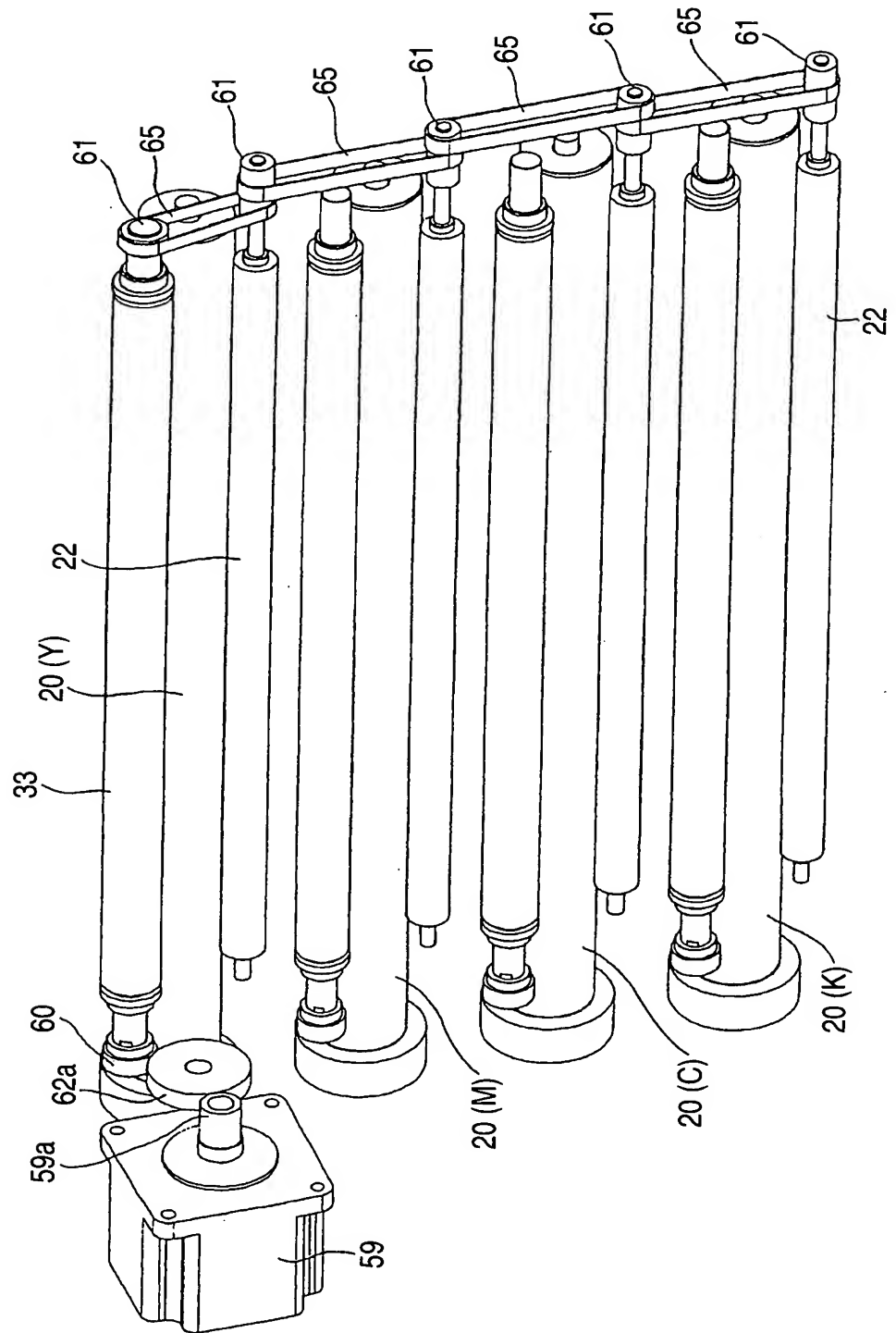


FIG. 7

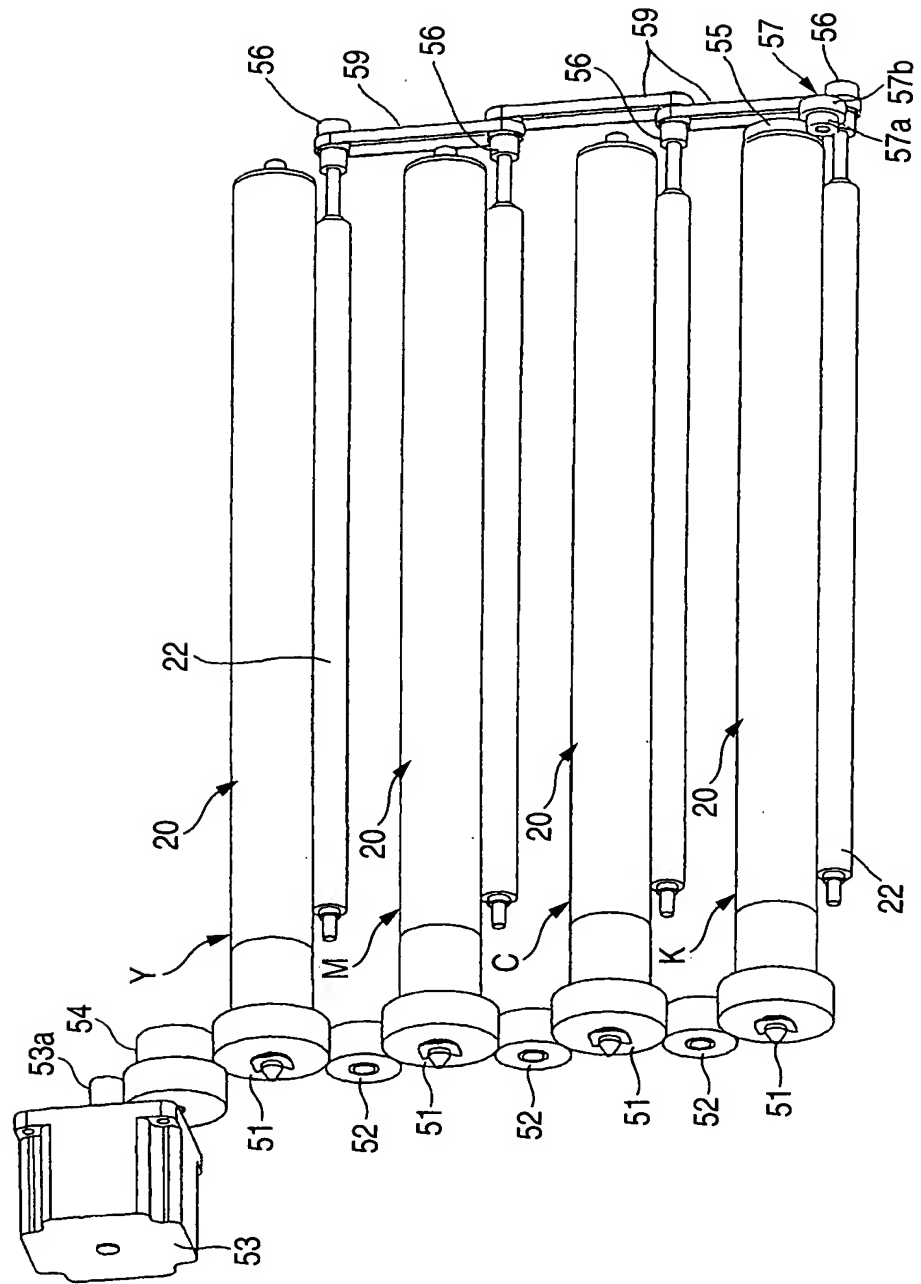


FIG. 8

NAME OF MEMBER	PHOTOSENSITIVE MEMBER (K)	INTER-MEDIATE SHAFT	BRUSH ROLLER (K) ROLLER (K)	BRUSH ROLLER (C) ROLLER (C)	BRUSH ROLLER (M) ROLLER (M)	BRUSH ROLLER (Y) ROLLER (Y)
OUTER DIAMETER (mm)	30	-	14	14	14	14
TEETH NUMBER MODULE: 0.5 TRANSFER EFFICIENCY: 0.95						
NUMBER OF REVOLUTIONS (rpm)	99.10	239.49	419.11	419.11	419.11	419.11
PERIPHERAL VELOCITY (mm/SEC)	155.67	-	307.22	307.22	307.22	307.22
DRIVING TORQUE (N·m)						
BRUSH ROLLER (Y)	0.0230	0.0090	0.0049			
BRUSH ROLLER (M)	0.0242	0.0095	0.0052	0.0049		
BRUSH ROLLER (C)	0.0254	0.0100	0.0054	0.0052	0.0049	
BRUSH ROLLER (K)	0.0268	0.0105	0.0057	0.0054	0.0052	0.0049
<TOTAL>	0.0994					

FIG. 9

9/15

NAME OF MEMBER	MOTOR SHAFT	INTER- MEDIATE SHAFT	PHOTO- SENSITIVE MEMBER (Y)	IDLER SHAFT	PHOTO- SENSITIVE MEMBER (M)	IDLER SHAFT	PHOTO- SENSITIVE MEMBER (C)	IDLER SHAFT	PHOTO- SENSITIVE MEMBER (K)
TEETH NUMBER MODULE: 0.8 TRANSFER EFFICIENCY: 0.95									
NUMBER OF REVOLUTIONS (rpm)	454.68	151.56	99.10	151.56	99.10	151.56	99.10	151.56	99.10
COMPARATIVE EXAMPLE 2									UNIT: N·m
1ST PHOTOSENSITIVE MEMBER	0.0059	0.0169	0.0245						
2ND PHOTOSENSITIVE MEMBER	0.0066	0.0187	0.0271	0.0169	0.0245				
3RD PHOTOSENSITIVE MEMBER	0.0073	0.0207	0.0301	0.0187	0.0271	0.0169	0.0245		
4TH PHOTOSENSITIVE MEMBER	0.0080	0.0229	0.0333	0.0207	0.0301	0.0187	0.0271	0.0169	0.0245
<TOTAL>	0.0278								
EMBODIMENT 4 DRIVING TORQUE BRUSH ROLLER	0.0326	0.0930	0.1352	0.0840	0.1220	0.0758	0.1101	0.0684	0.0994
1ST PHOTOSENSITIVE MEMBER	0.0059	0.0169	0.0245						
2ND PHOTOSENSITIVE MEMBER	0.0066	0.0187	0.0271	0.0169	0.0245				
3RD PHOTOSENSITIVE MEMBER	0.0073	0.0207	0.0301	0.0187	0.0271	0.0169	0.0245		
4TH PHOTOSENSITIVE MEMBER	0.0080	0.0229	0.0333	0.0207	0.0301	0.0187	0.0271	0.0169	0.0245
<TOTAL>	0.0604								

FIG. 10

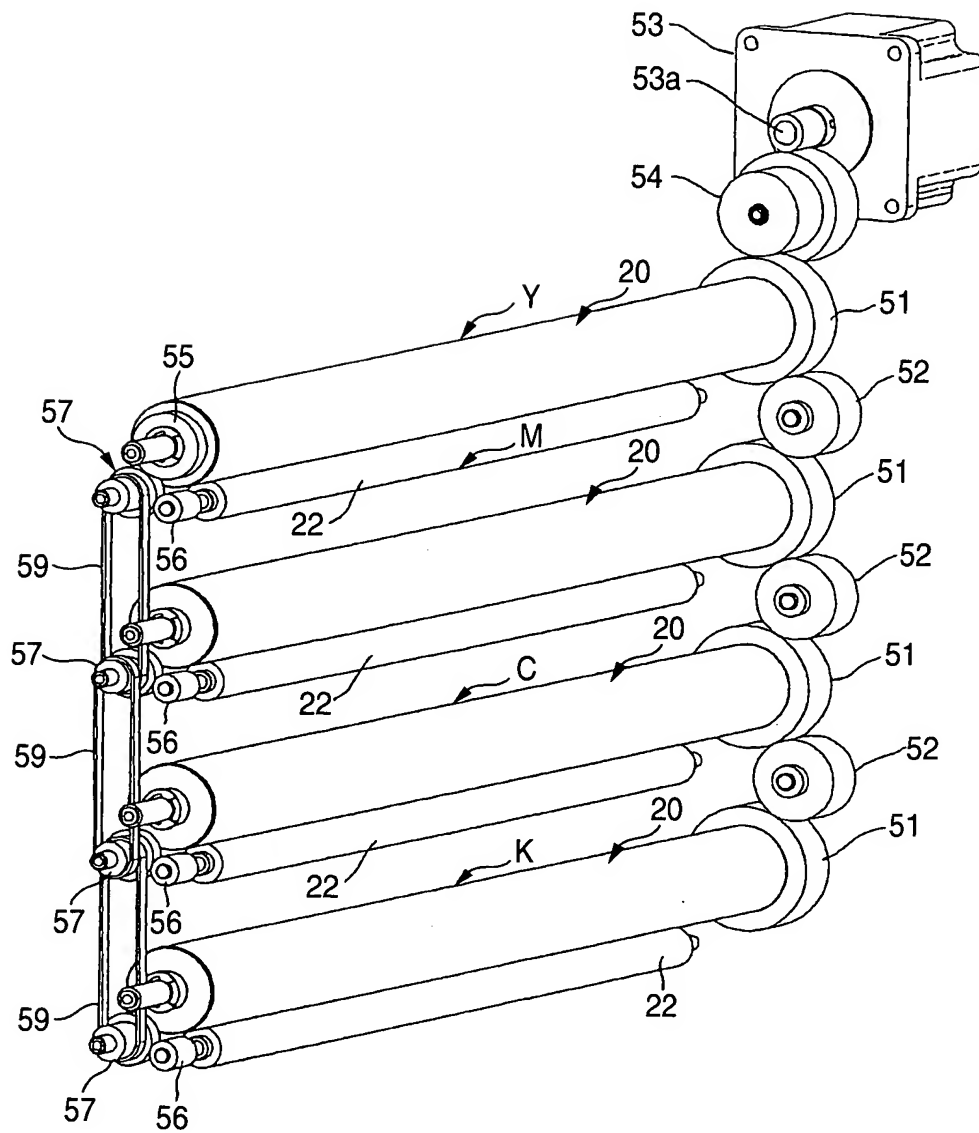


FIG. 11

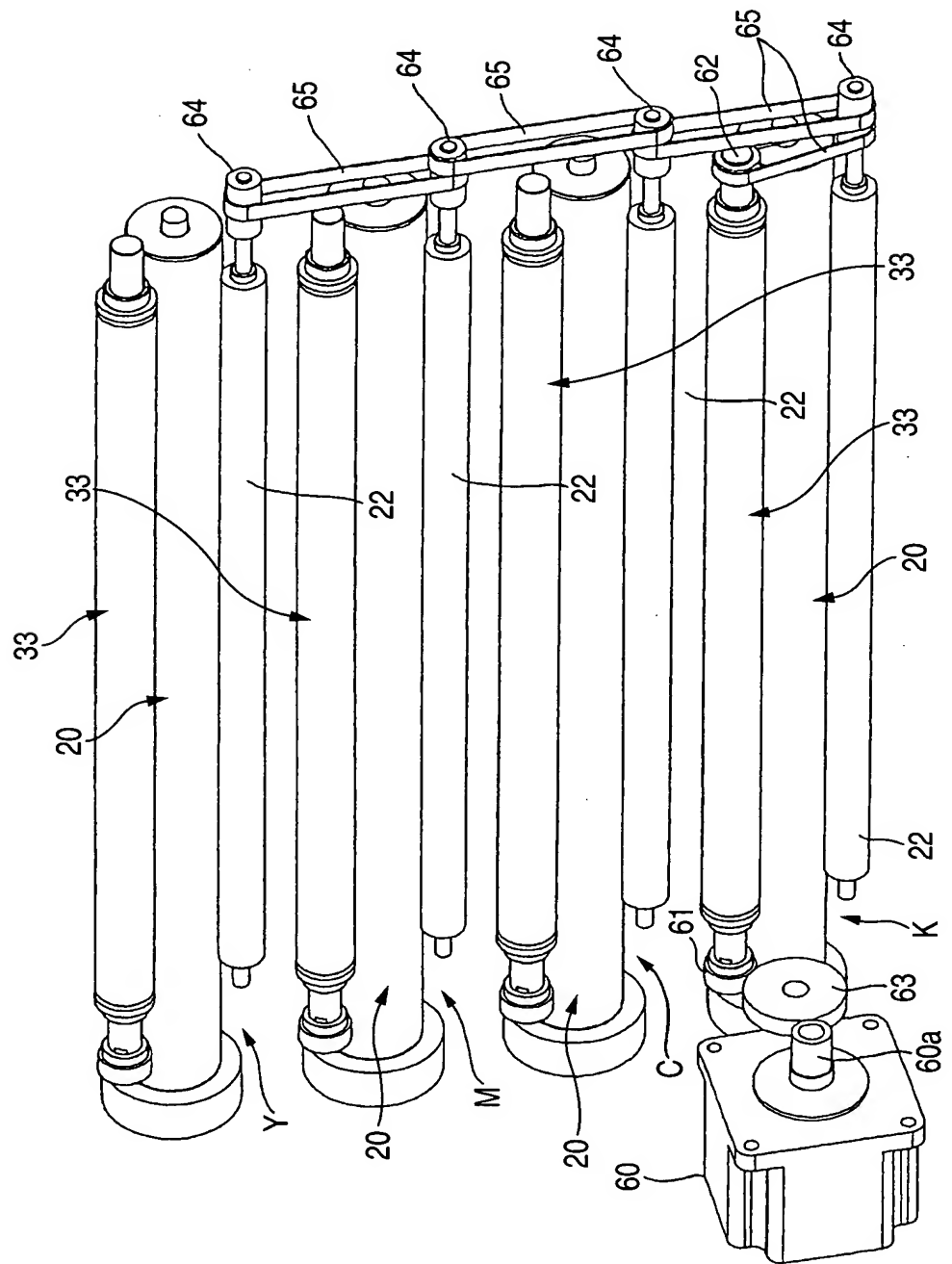


FIG. 12

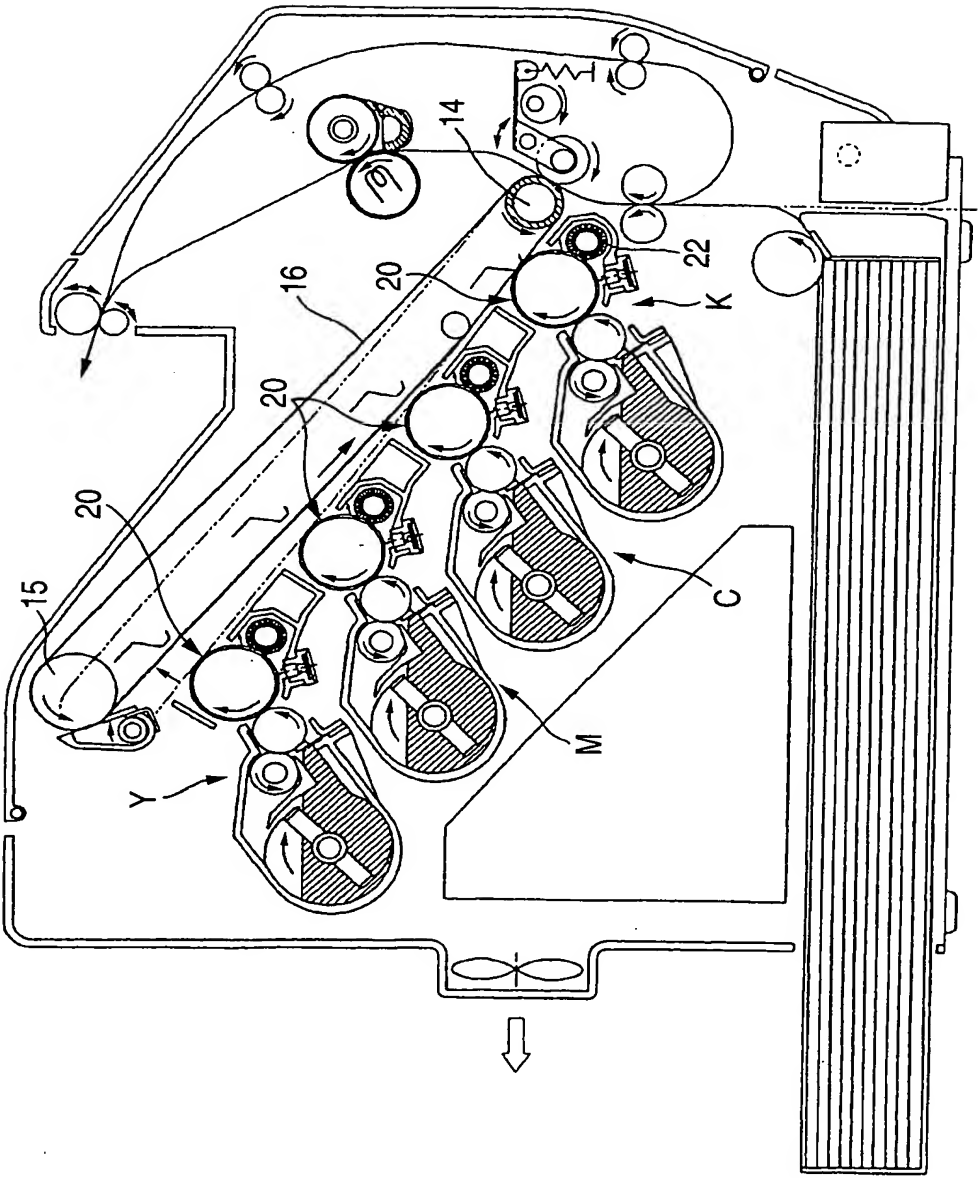


FIG. 14

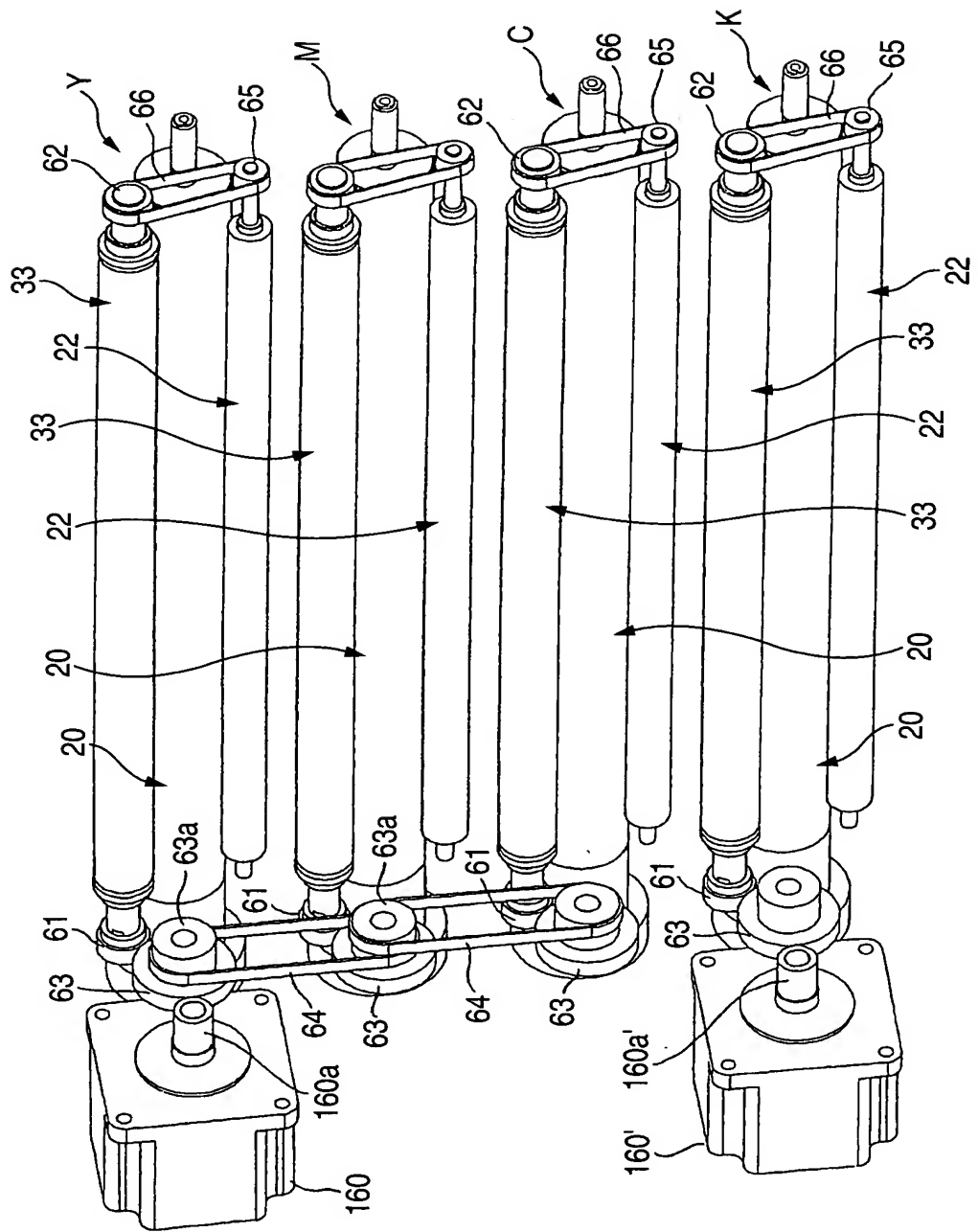


FIG. 15

